APPENDIX B

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Transportation Network Information

The concept of Idaho's transportation system is based on a series of major transportation corridors that are comprised of integrated modal networks. These networks include roadways, public transportation, rail, aviation, Lewiston seaport, pipelines, bicycle facilities and communications that serve local, regional, interregional, interstate and international customers.

On a local scale the roadway network consists of streets and roads; regionally, it consists of major arterials and; nationally, it consists of interregional state highways, the National Highway System, and Interstate highways. The mass transit network is composed of bus service for local and regional travel and intercity bus for traveling between regions and states.



General aviation airports comprise the local aviation network, whereas, major airports serve regional travel and national and international airports (which provide commercial service and serve over one-million enplanements per year) and provide interregional travel. The waterway network is comprised of the Lewiston seaport. Bike and pedestrian ways are comprised of local and some regional and interregional trails. The communications network is provided by broadband fiber optics, copper wires, and radio waves. The pipeline network is comprised of pipelines of various sizes which carry various fluid products.

The networks can be described by looking at their common features, which are laid out in tables on the following pages. Common features include the type of service provided by each network, i.e., passenger or freight, the network's customers (users), current and projected usage, number of miles or facilities composing the network, its linkage with other modes of transportation, and network or facility owner and operator. Also discussed is each modal network's affect on Idaho's economy.

Conceptually, the total transportation system within Idaho should provide service as a unified system of all travel networks. The system's networks provide a variety of modes of travel that satisfy the different needs of the customer or user; therefore, the common focus for all networks is the customer.

Idaho Roadway Network

The Idaho Roadway Network consists of the State Highway System and local jurisdiction highways. The State Highway System contains rural and urban principal and minor arterials and major collectors. The local jurisdiction highways are comprised of urban collectors and minor and principal arterials, rural minor and major collectors, and urban and rural local access roads. Other highways are owned and operated by the federal government and administered under the federal lands program.

EXHIBIT 26 IDAHO ROADWAY NETWORK INFORMATION

Туре	Customer	1990 Usage*	2015 Usage*	System Miles	Linkage	Owner	Operator
Statewide Passenger State Highway System Local Agencies Freight	Autos Buses Trucks	State/Local 8.6 billion State Only 4.7 billion State/Local 1.3 billion State Only 0.8 billion	13.1 billion7.1 billion2.5 billion1.5 billion	4,952 14,107 12,719 3,492	Inter- regional, interstate, regional, local, state, rail. Rail, air, barge.	Counties Hwy Dist Cities. Private	Counties, Hwy Dist Cities & Private.
Total		15.4 billion	24.2 billion	35,270			

* Annual Vehicle Miles Traveled

- Sixty and one-half percent (60.5%) of the total travel occurs on principal arterials (including interstates) and minor arterials, which together comprise only 6.36% of the public road miles.
- Of the state highways, 1,110 miles are designated "Scenic Byways."
- Sixty-two percent (62%) of the total commercial travel occurs on the State Highway System.
- Hazardous waste is carried by trucks on designated routes.
- The roadway network constitutes the primary transportation system for economic activity; however, rail and barge are very important for bulk freight and long haul and air is important for light weight fast delivery. Each of these systems is important to the overall transportation system of Idaho.

Idaho Public Transportation Network

The Idaho Public Transportation Network consists of inter-city bus and commuter and local bus, paratransit services, car and van pools, and AMTRAK service owned and operated by various entities. Below is a summary of the network's size, usage, and linkage with other modes of transportation:

EXHIBIT 27
IDAHO PUBLIC TRANSPORTATION NETWORK INFORMATION

Туре	Customer	1990 Usage* (000s)	2015 Usage* (000s)	Linkage	Owner	Operator
Statewide Regional & Local Bus Para-transit Rail	Commuters, shoppers, young, elderly, handicapped, disadvantaged	1,763	8,275	Airports, park & ride, bicycles, pedestrians, work & shop, AMTRAK	Private City and Private	Private City and Private
Total		1,763	8,275			

^{*} The 2015 usage figures are predicated on significant increases in resources.

- There are 11 public transit operators in Idaho.
- Idaho has 56 non-profit Section 16 transit agencies that receive federal funding for the transportation of elderly and disabled persons.
- Economic Impact: The public transportation network provides thousands of Idahoans access to jobs, schools, services, and recreation. In addition, it provides transportation access to people who cannot afford or who choose to use other modes of transport. The economic advantage of public transportation is that it provides social equity for the poor, elderly, handicapped, etc. in transportation.

Idaho Rail Network

The Idaho Rail Network consists of interstate passenger and freight and regional feeder freight service owned and operated by private entities. Below is a summary of the network's size, usage, and linkage with other modes of transportation:

EXHIBIT 28 IDAHO RAIL NETWORK INFORMATION

Туре	Customer	1990 Usage	2015 Usage	Passenger Stations	Linkage	Owner	Operator
Passenger Interstate	Long- distance travelers.	45,000 passengers	54,600 passengers	Five stations in Idaho plus Ontario and Spokane	Highway Transit Air	Amtrak	Amtrak
Freight	Rail Shippers	71 million tons	116 million tons	2025 miles	Highway Air Barge	Railroads	Private Railroads

- In Idaho there are two Amtrak routes operated by Amtrak one in northern Idaho and one in southern Idaho.
- Two major railroads and six regional and shortline railroads operate in Idaho. The Class I railroads are the: 1) Burlington Northern Railroad and, 2) the Union Pacific Railroad. The regional and shortline carriers are: 1) Camas Prairie, 2) Montana Rail Link, 3) Palouse River Railroad, 4) Idaho Northern and Pacific, 5) Eastern Idaho Railroad, and 6) St. Maries River Railroad...
- Minerals, farm, food and kindred products, and forest and wood products are the major commodities carried by rail in Idaho.
- Economic Impact: The rail industry network is overwhelmingly privately-owned and privately maintained, stimulating state and local economic activity by providing safe, efficient, low-cost, and environmentally-friendly transportation services. Railroads provide an often irreplaceable link between producers and markets for raw, semi-processed, and finished goods of all types.

Idaho's Aviation Network

The Idaho Aviation Network consists of airports and heliports owned and operated by various entities. Below is a summary of the network's size, usage, and linkage with other modes of transportation:

EXHIBIT 29
IDAHO AVIATION NETWORK INFORMATION

Туре	Customer	1990 Usage*	2015 Usage*	Airports	Linkage	Owner	Operator
Comm. Passenger	Airlines Public	896,686	1,973,000	7	Highway Transit Rail	State County City	State County City
Freight	Cargo Services	6,292	12,500	11		Private	Private
General Aviation	Public	1,102,000	1,255,000	121		Federal State County City Private	Federal State County City Private
Heliports Passenger Medical Military	Emergency Military	3506 106	7608 230	42 20		Private Federal	Private Federal
Total Passenger Total Operation Total Freight		896,686 1,105,612 6,292	1,973,000 2,368,450 12,500				
Total				201			

- ! Passengers Enplanements / Deplanements
- ! Freight Tons
- * 99 percent of the public-use airports are publicly owned.
- * Economic Impact: The aviation network provides the quickest travel mode for economic activity. High value small cargo (e.g., Federal Express, UPS), which use the aviation system extensively, is the fastest growing sector of freight activity. The economic advantage of aviation is speed.

Idaho's Seaport

Idaho's seaport, the Port of Lewiston, handles major agriculture, forest products, and commercial cargo. It is located 465 miles inland at the upper end of the Columbia-Snake River waterway system. Below is a summary of seaport usage and linkage with other modes of transportation:

EXHIBIT 30 IDAHO SEAPORT INFORMATION

Туре	Customer	1994 Usage	2015 Usage	Port	Linkage	Owner	Operator
Seaport of Lewiston	Grain	807,000*	1,500,000*	Lewiston	Highway and Rail	Public	Public
Freight	Break-bulk and Forest	34,500*	60,000*		5		
Containers	Products Containers	14,436 TEU• (approx. 158,800 tons)	80,000 TEU• (approx. 880,000 tons)		Rail		
Total		1,000,300* including	2,440,000* including containers	Lewiston			

^{*} Tons

Most cargo is shipped as dry bulk (e.g., grain and lumber products).

Idaho's Lewiston port is impacted both by land access and water-side access issues. Land-side access issues include the location of intermodal transfer facilities for the transfer of grain from rail and truck to barge, and the ability of trucks to move in an efficient manner to and from the port area. Waterside access issues include channel dredging. Also, the possible drawdown of the Lower Granite Reservoir as a salmon recovery measure will continue to be of concern. Considerable planning is needed if such a measure is implemented.

^{**} Twenty-foot Equivalent Units

Idaho Pipeline Network

Idaho's Pipeline Network consists of underground oil and gas pipelines that are owned and operated by various petroleum companies. Below is a summary of the network's owners, usage, and linkage with other modes of transportation.

EXHIBIT 31 IDAHO PIPELINE NETWORK INFORMATION

Company	Product	1990 Usage	Linkage	Owner	Operator
Chevron Pipeline Co., Salt Lake City	Petroleum Products	Bbls* Bcf/day#	Salt LakeCity Burley Umatilla Spokane Pocatello	Private	Private
Chevron Pipeline Co. Northwest Division	Petroleum Products		Montana Coeur d'Alene Spokane	Private	Private
Northwest Pipeline Co.	Natural Gas		Soda Springs Pocatello Burley Boise Umatilla Spokane Coeur d' Alene	Private	Private
Holly Corp.	Petroleum, Jet fuel		Mountain Home AFB	USAF	USAF
Kinley Corp.	JP 4 Jet fuel		Gowen Field	Govt.	Govt.
Simplot	Phosphate, slurry		Coeur d'Alene - Pocatello	Private	Private

*Bbl = Barrels

** Bcf = Billion Cubic Feet

- ! Petroleum products pipelines carry gasoline, kerosene, liquid petroleum gas and fuel oil from refineries to bulk terminals or marketing points. Where demand is sufficient, such as jet fuel at air fields, the product pipeline goes directly to the customer.
- ! There are three types of natural gas pipelines: 1)Field and gathering pipelines transport natural gas from individual wells to a processing point for gas separation and treatment, 2)transmission lines transport gas from a source of supply to a distribution center, a large-volume customer, or to an interconnecting source of supply. These lines operate at substantially higher pressure than the other types, and 3)distrubution pipelines carry or control the supply of gas from a local center of distribution to the sales meter.

Idaho's Bicycle Facilities Network

Idaho currently has four types of bikeways: Class I Separated Multi-use Pathway, such as the Boise Greenbelt; Class II - Bike Lane, a striped line on the shoulder of a road; Class III - Shared Lane, which is similar to a bike lane but is not striped due to narrow road width; and Class IV - Shoulder Bikeway, a separate lane adjacent to a highway. Bicyclists have the same access rights to the use of public roadways as motorists; however, because of safety concerns, low availability of Classes I-III facilities, and breaks in a route, dedicated bikeways such as Class IV routes are the most heavily used. Currently, linkage of bicycles with other modes of travel is poor.

EXHIBIT 32 IDAHO BICYCLE FACILITIES NETWORK INFORMATION

District	Separated Pathway	Bicycle Lanes
District 1	26 miles	11 miles
District 2	20 miles	6 miles
District 3	35 miles	50 miles
District 4	25 miles	0
District 5	3 miles	12 miles
District 6	8 miles	6 miles
Total	117 miles	85 miles

8. Idaho's Communications Network

Communications technology has the potential to help improve the state's economy and reduce the negative impacts of motor vehicle use. Use of a communications network could help employ disabled people, many of whom are not able to travel easily, and those who prefer to have a home-based business. Idaho's communication network now consists of telephones, electronic mail, audio and videotext owned and operated by various private entities. The future of information movement relies on fiber optics technology, which allows more information to be transmitted thousands of times faster and in a more user-friendly way than the current system.